MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

3D Instruments Inc

California Manufacturing Technology Consulting

3D Instruments, Inc. Achieves Manufacturing Excellence

Client Profile:

3D Instruments, founded in 1970, designs, fabricates, tests and ships a wide variety of high quality pressure gauges in its Anaheim, California facility. Using a proprietary unique Bourdon Tube technology, the products are manufactured and sold to two major U.S. markets: life support and energy processing. Major oil refineries, U.S. military organizations and fire departments are key customers. 3D Instruments employs 105 people.

Situation:

Historically, 3D Instruments had a steady increase in sales. However, in late 2007, the company redefined their strategic goals to dramatically increase profit margins and market share over the next several years. To accomplish these ambitious goals, they wanted to improve operational efficiency and create a culture of continuous improvement company-wide. The company needed outside assistance in training and implementing Lean to reduce cost and establish a culture of continuous improvement. They contacted California Manufacturing Technology Consulting (CMTC), a NIST MEP network affiliate, for assistance.

Solution:

CMTC developed a training program for the 3D Instruments Lean team, which included a number of key employees and managers. Two full-day 'simulation-based' Lean principles training sessions were conducted for the group followed by a 40-hour exercise to develop a Value Stream Map (VSM) for the distribution product family. With the VSM, the 'current state' production path from customer order to customer delivery was documented. CMTC worked with team members to develop a list of improvement opportunities, and the implementation of improvement opportunities (Kaizen) in both the manufacturing and office work areas. The improvement event (Kaizen) in the manufacturing area resulted in lead-time reduction from 6 weeks to 1 week in the Test and Process Group work areas. The Kaizen improvement event in the office area resulted in customer service new order lead-time reduction by 4 days. The changes also improved existing sales order processing lead-time. A one line item/bar code per page was implemented in the sales orders to eliminate photocopying needs and reduce mistakes.

Results:

- * Increased productivity by 29 percent.
- * Reduced lead time from 6 weeks to 1 week.
- * Realized \$11,509 in cost savings.

Testimonial:



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"CMTC has become the true trusted advisor in facilitating our transition to a Lean environment and becoming more competitive."

Garey Cooper, VP and General Manager

